SECRET

COPY No. 43

C.B. 0270

METEOROLOGICAL OFFICE

CYPHER

1916

MET/2/6/1/4

SECRET. Copy No. 43

C.B. 0270

METEOROLOGICAL OFFICE CYPHER, 1916.

(The Decypher is contained in a separate volume, C.B. 0271.)

INTRODUCTION.

Meteorological Office Cypher and Decypher, 1916, are intended for cyphering the Meteorological data exchanged by telegraph between the Meteorological Offices of the Allies, and between the Meteorological Office, London, and certain Meteorological Officers Abroad.

2. When brought into force they will supersede "C.B. 0174. Foreign Meteorological Cypher," all copies of which should then be burnt.

3. The words, phrases, &c., which are likely to be frequently used have each been allotted 5 or more groups. **These groups should be used indiscriminately, and, if possible, the same one should never occur twice in the same message.**

4. Any attempt to save time in cyphering by memorizing groups representing such words, phrases, &c., instead of using indiscriminately the groups allotted, tends to defeat the object of the Cypher and to compromise its secrecy.

5. It will be noticed that the *whole* of messages cyphered in the Meteorological Cypher consist of groups of *five* figures, and not some four and some five as in the former "Foreign Meteorological Cypher."

ADMIRALTY WAR STAFF,
Signal Section (No. 347).
1st *December*, 1916.

(C 92)

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Note.—The Decypher is contained in a separate volume (C.B. 0271).

INSTRUCTIONS FOR USE OF METEOROLOGICAL OFFICE CYPHER, 1916.

Vocabulary Section.

Pages 6 to 30 are specially designed for Forecasts, but their groups may also be used as necessary in conjunction with those taken from Tables I or II (*see* pars. 3 and 8 below).

2. The headings in heavy type (*e.g.*, "Position of Depressions" on page 7) do *not* form part of the text of the message.

Example 1 :—*To cypher* :—

"Balkan region wind North-West force near surface moderate or fresh weather improving"

Balkan region	= 24618
Wind North-West	= 40173
Force near surface moderate or fresh	= 68271
weather improving	= 68091

transmitted as—
24618
40173
68271
68091

Spelling Table.

3. Any words which are not given in the Cypher must be spelt out by means of Table I.

4. **Groups taken from this Table must invariably be preceded by one of the groups printed at the head of the Table.**

5. For each letter of the word to be spelt substitute *any one* of the 3-figure groups shown against it in Table I (*e.g.*, "K" can be represented by either 064, 989 *or* 915).

6. The figures obtained from Table I must be divided into groups of 5, dummy figures (chosen, if *3* are required, so as not to make sense when decyphered) being added to complete the last group to 5 if necessary.

Example 2 :—*To spell* "Bora" :—

Decypher following 3 groups from Table I = 30481

B	= 217
O	= 931
R	= 833
A	= 566

transmitted as—
30481
21793
18335
66985

the last 3 figures, "985," being dummies,

7. It should be noted that the group selected to precede the groups taken from Table I should be one which indicates the number of complete *5*-figure (*not* 3-figure) groups to be decyphered from Table I.

Table for recyphering 5-Figure International Groups.

8. Table II is designed for recyphering the 5-figure groups of Observations which have been first cyphered in the "International [Meteorological] Telegraphic Code."

9. **Groups taken from this Table must invariably be preceded by one of the groups printed at the head of the Table.**

10. For each *pair* of figures of the "International Code" message substitute *any one* of the 7 alternative 3-figure groups shown against it in Table II (*e.g.*, 33 can be represented *either by* 656, 973, 163, 078, 317, 489 *or* 759). It is of the utmost importance that these 7 alternative groups should be used indiscriminately. Habitual use of any *one* column (*e.g.*, the first, last, &c.) would defeat the object of the Cypher.

11. In the case of an odd number of figures, for the last *single* figure substitute one of the 3-figure groups at the commencement of the Table.

12. The figures obtained from Table II must be divided into groups of 5, dummy figures being added to complete the last group to 5 if necessary.

Example 3 :—*To recypher*—

22502 20833 14789

Decypher following 5 groups from Table II = 63754

22	= 433
50	= 436
22	= 319
08	= 954
33	= 973
14	= 171
78	= 115
9	= 783

transmitted as—
63754
43343
63199
54973
17111
57832

the last figure, "2," being a dummy.

13. It should be noted that the group selected to precede the groups taken from Table II should be one which indicates the number of complete *5*-figure (*not* 3-figure) groups to be decyphered from Table II.

Specimen Complete Message.

Example 4:—To cypher—

"Group one twelve missing 07708 20000 group two 24900 11202 27528 depression over Albania moving to South-Eastward you may anticipate some rain or snow."

If looked out on page				
23	...	Group	=	34859
18	...	1	=	56629
18	...	12	=	40010
25	...	missing	=	26193
33	...	Decypher following 3 groups from Table II	=	10902
34	...	07	=	994 ✓
35	...	70	=	164 ✓
35	...	82	=	825 ✓
33	...	00	=	012 ✓
33	...	00	=	977 ✓
23	...	Group	=	18558
18	...	2	=	53905
33	...	Decypher following 5 groups from Table II	=	30771
34	...	24	=	725
35	...	90	=	593
33	...	01	=	511
34	...	12	=	689
33	...	02	=	235
34	...	27	=	211
34	...	52	=	255
33	...	8	=	254
7	...	depression over	=	65499
31	...	Decypher following 3 groups from Table I	=	31247
32	...	A	=	566
32	...	L	=	599
32	...	B	=	485
32	...	A	=	299
32	...	N	=	887
32	...	I	=	631
32	...	A	=	057
10	...	moving to South Eastward	=	34743
30	...	you may anticipate	=	67700
15	...	some rain	=	45583
16	...	or snow	=	55064

transmitted as—

34859
56629
40010
26193
10902
99416
48250
12977
18558
53905
30771
72559
35146
89235
21125
52548
65499
31247
56659
94852
99887
63105
76841
34743
67700
45583
55064

Note.—Figures underlined are dummies.

DATES OF OBSERVATION.

Weather report for	1st	00402, 65471, 60291, 14711 *or* 37673
	2nd	33717, 28172, 20791, 60926 *or* 50086
	3rd	04301, 52476, 04401, 14438 *or* 01123
	4th	25381, 02987, 34642, 00862 *or* 22397
	5th	06469, 17523, 04510, 13243 *or* 60876
	6th	36621, 42718, 06599, 31559 *or* 28991
	7th	02727, 68847, 50786, 30746 *or* 40336
	8th	30406, 44399, 18003, 30092 *or* 65071
	9th	69325, 54549, 31411, 56676 *or* 33982
	10th	29906, 36521, 63779, 68073 *or* 10356
	11th	40813, 31635, 11935, 46203 *or* 63803
	12th	26443, 05841, 32334, 20337 *or* 14102
	13th	67731, 55752, 43182, 67013 *or* 00779
	14th	44936, 52898, 65754, 15575 *or* 58155
	15th	31293, 27814, 45135, 44000 *or* 62493
	16th	42103, 05273, 52503, 49317 *or* 58447
	17th	11414, 39463, 43674, 21134 *or* 59103
	18th	17458, 04234, 22843, 66977 *or* 34697
	19th	20442, 30893, 19571, 33902 *or* 18829
	20th	61277, 30398, 61358, 66453 *or* 39211
	21st	16209, 01235, 58904, 45809 *or* 39998
	22nd	21648, 33005, 08837, 49264 *or* 51742
	23rd	62627, 07500, 21476, 00269 *or* 30230
	24th	07285, 66793, 52389, 20001 *or* 36241
	25th	10962, 49683, 37551, 43472 *or* 04215
	26th	30372, 42356, 66771, 44561 *or* 20256
	27th	52576, 67399, 05591, 12838 *or* 37666
	28th	67501, 33789, 18692, 55609 *or* 44687
	29th	25875, 44269, 04199, 23347 *or* 51462
	30th	34303, 28691, 64009, 34676 *or* 43617
	31st	19309, 53996, 28169, 41907 *or* 58590

DEPRESSIONS.

Position of Depressions.

Depression	None at present...	39685
	Centred near	12258
	over	65499
	beyond Arctic Circle	19713
	off Coast of Portugal	38428
	off Hebrides	38818
	off Mouth of Channel	54523
	off North of Scotland	48476
	off North-West of Ireland	22543
	off South-West of Ireland	10054
	off West of Ireland	68247
	off West of Scotland	05124
	over Adriatic	54097
	over Algeria	23156
	over Asia Minor...	48387
	over Austria	28092
	over Azores	10234
	over Balkan Peninsula...	48785
	over Baltic	67413
	over Bay of Biscay	01054
	over Black Sea ...	57891
	over British Isles	23238
	over Brittany	21996
	over Corsica	57793
	over Cyprus	12379
	over Denmark ...	63082
	over England	28195
	over English Channel	60031
	over Faroe	29406
	over Finland	13809
	over Flanders	51387
	over France	60671
	over Germany	12631
	over Greece	05567
	over Hungary	43595
	over Iceland	54902
	over Ireland	44579

[*Continued*

Position of Depressions—*continued.*

Depression	over Irish Sea	27848
	over Morocco	17058
	over Normandy	25313
	over North Egypt	40001
	over North Italy	65804
	over North Sea	27581
	over North Sea (Northern part)	34097
	over North Sea (Southern part)	54406
	over Northern England	01813
	over Poland	41159
	over Russia	28290
	over Scandinavia	66534
	over Scotland	37493
	over Sicily	29314
	over South Italy	44725
	over Southern England	64203
	over Southern Norway...	22689
	over Southern Russia	36491
	over Spain	20372
	over Thames Estuary	04827
	over Tripoli	38217
	over Tunis	48952
	over Western Mediterranean	13732
	over White Sea	20098

(*For apparent motion of depression, see page* 10.)

ANTICYCLONES.

Position of Anticyclone.

Anticyclone	None at present	58325
	over	13401
	off Mouth of Channel	47781
	off West of Ireland	23209
	over Algeria	18509
	over Austria	37802
	over Azores	28235
	over Balkan Peninsula	57987
	over Bay of Biscay	30088
	over British Isles	64801
	over Central Mediterranean...	02705
	over Central Russia	43676
	over Cyrenaica	30049
	over Denmark	67511
	over Eastern Mediterranean	22276
	over England	32718
	over English Channel	16437
	over Finland	25241
	over France	56458
	over Germany	00089
	over Hungary	32906
	over Iceland	10834
	over Ireland	57416
	over Norway	02511
	over North-Eastern Atlantic	63402
	over North Sea	54961
	over North Sea (Northern part)	20589
	over North Sea (Southern part)	31376
	over Northern England	40392
	over Poland	34537
	over Scandinavia	43198
	over Scotland...	61527
	over South Russia	36785
	over Southern England	55755
	over Spain	41637
	over Tripoli	33511
	over Western Mediterranean	05399
	over White Sea	23694

[*Continued*

Apparent Motion and Changes of Depression or Anticyclone :—

Remaining stationary ...	32309, 67119, 48135, 20861, 56979, 14264, 34158, 01192, 65202 *or* 29513
Moving to	34201, 51764, 17674, 40388, 35844, 62234, 08988, 45786, 21407 *or* 51209
Moving to Northward ...	34426, 08939, 68561, 15843, 40864, 21188, 38134, 60378, 05176 *or* 56643
Moving to North-Eastward...	27407, 38527, 40179, 24283, 45789, 01172, 69875, 26658, 53001 *or* 30197
Moving to Eastward ...	16572, 44967, 08576, 67034, 20206, 59926, 37625, 10663, 44869 *or* 02163
Moving to South-Eastward ...	67911, 26307, 55864, 34743, 16535, 68293, 41339, 59467, 35143 *or* 22818
Moving to Southward ...	01152, 66798, 17345, 31912, 44770, 21791, 28769, 57803, 18313 *or* 65023
Moving to South-Westward...	09419, 32106, 12896, 20584, 55013, 39801, 43178, 09273, 58486 *or* 26517
Moving to Westward ...	32339, 07681, 43584, 50267, 35901, 17709, 68731, 40598, 22813 *or* 50263
Moving to North-Westward...	14445, 33190, 04991, 68177, 43561, 56733, 34369, 40554, 45653 *or* 21267
Motion uncertain	51058, 28943, 35278, 59983, 46323, 60422, 27334, 00312, 44387 *or* 58352
Increasing in intensity ...	04671, 67464, 14381, 00003, 44247, 60008, 31882, 09910, 54053 *or* 20110
Decreasing in intensity ...	03065, 36150, 42623, 68960, 56641, 27216, 39347, 17963, 50400 *or* 35000

WIND.

Direction :—

Wind	between North and East	34229, 17135, 41293, 60411, 26959, 53208, 38541, 06449, 29830 *or* 41711
	between North-East and South-East	21530, 65646, 30070, 59421, 41792, 23346, 18845, 35319, 58847 *or* 28927
	between East and South	59316, 06717, 30389, 22135, 09828, 33090, 30217, 00758, 28617 *or* 54438
	between South-East and South-West	31088, 63557, 26862, 44414, 20285, 42105, 64497, 49185, 55817 *or* 58553
	between South and West	08591, 53038, 28529, 16626, 41436, 21207, 46786, 52567, 47672 *or* 20013
	between South-West and North-West	59623, 00170, 20922, 65320, 68901, 56103, 17196, 22176, 18883 *or* 13906
	between West and North	57843, 36311, 55634, 40489, 22252, 11711, 16804, 30719, 00235 *or* 58714
	between North-West and North-East	09365, 41017, 69148, 12749, 61027, 16934, 62359, 23733, 12195 *or* 07653
	between North and North-East	65163, 18919, 17313, 22205, 62691, 10009, 67623, 08967, 63947 *or* 33911
	between North-East and East	69002, 19607, 61600, 50309, 20581, 53617, 69597, 45476, 33530 *or* 63544
	between East and South-East	59761, 05445, 49886, 09498, 19208, 13209, 39702, 51601, 45739 *or* 09299
	between South-East and South	34349, 38996, 48998, 53563, 36110, 66512, 61200, 27600, 40053 *or* 30576
	between South and South-West	08154, 31009, 11913, 50054, 31789, 12411, 22517, 07805, 22869 *or* 66759
	between South-West and West	35939, 52826, 43375, 35667, 47519, 37825, 01645, 69278, 37408 *or* 33387
	between West and North-West	27609, 16104, 33346, 26928, 31725, 17513, 38346, 38233, 10001 *or* 41724
	between North-West and North	01762, 64513, 58533, 66781, 09096, 46496, 53942, 10117, 24537 *or* 67744
	Indefinite	04543, 51748, 17741, 31772, 07766, 52109, 49309, 16391, 23064 *or* 54419
	North	62179, 08901, 40524, 16402, 21311, 04256, 57195, 44478, 63787 *or* 06399
	North-North-East ...	55523, 01267, 49653, 62945, 21958, 09792, 50027, 11325, 49134 *or* 30107
	North-East	09971, 67284, 50606, 23343, 15423, 54023, 03435, 16713, 55359 *or* 27687
	East-North-East ...	06153, 33406, 12364, 01124, 23176, 57941, 67776, 06933, 54811 *or* 35027
	East	10384, 45027, 19888, 55234, 10455, 48893, 08520, 57159, 68700 *or* 37104

[*Continued*

WIND—*continued.*

Direction—*continued.*

Wind	East-South-East ...	62208, 10476, 25913, 08609, 46437, 15771, 35467, 21633, 42227 *or* 52498
	South-East	17092, 30117, 68957, 45464, 25532, 19511, 39572, 50103, 46081 *or* 33311
	South-South-East ...	19028, 21382, 53004, 64488, 47039, 56463, 11258, 29742, 17207 *or* 56610
	South	08555, 68666, 56993, 13679, 43811, 02867, 54068, 26537, 13472 *or* 40695
	South-South-West ...	59348, 01518, 25191, 68763, 49617, 06243, 51467, 01546, 25611 *or* 44393
	South-West	31389, 18895, 44036, 68223, 57308, 04261, 57284, 50076, 11206 *or* 22017
	West-South-West ...	33566, 69662, 39964, 58100, 24009, 14411, 03077, 68643, 44893 *or* 19857
	West	12461, 46389, 62999, 37769, 44993, 50123, 21814, 46407, 43901 *or* 64824
	West-North-West ...	11403, 45416, 50709, 48627, 21203, 26533, 16003, 44702, 16978 *or* 55408
	North-West	20610, 68444, 40173, 35969, 55417, 12713, 03873, 32865, 22408 *or* 68587
	North-North-West ...	44684, 11758, 61418, 32307, 47111, 64411, 23917, 57916, 43849 *or* 16009

Force at Surface of Ground :—

Force near surface	Calm or Light (Beaufort 0-2)*	20664, 30141, 59808, 21933, 43979, 40169, 34732, 69039, 49168 *or* 44146
	Light (Beaufort 1-3)* ...	29786, 43323, 62364, 36487, 51632, 39707, 01007, 09347, 36000 *or* 49019
	Moderate (Beaufort 3 or 4)*	69738, 39169, 03532, 53866, 19632, 46617, 14327, 31335, 50658 *or* 42754
	Moderate or Fresh (Beaufort 4-5)*	19353, 67761, 59911, 62478, 40358, 53703, 12193, 43273, 68271 *or* 65314
	Fresh or Strong (Beaufort 5-6)*	65571, 59203, 06581, 27241, 49644, 40018, 50478, 31283, 47290 *or* 28059
	Strong (Beaufort 6-7)* ...	66677, 13065, 69192, 36801, 56929, 14158, 48532, 32783, 10237 *or* 38624
	Strong to Gale (Beaufort 7-8)*	41756, 02425, 01963, 38001, 28703, 39117, 64853, 55949, 65300 *or* 53378
	Gales (Beaufort 8-9)* ...	42811, 63486, 37004, 61424, 08481, 21032, 56489, 24481, 53890 *or* 20115
	Strong Gales (Beaufort 9, 10 or over)*	05944, 67963, 51834, 14081, 32376, 57926, 38319, 47258, 04666 *or* 38544

* For Beaufort Scale, see page 36.

WIND—*continued.*

Changes of Wind :—

Backing	65179, 24127, 31259, 17890, 44472, 44514, 14136, 67693, 55571 *or* 11929
Backing and Freshening	05249, 20406, 43631, 32017, 68671, 17816, 64106, 33956, 08623 *or* 31346
Backing and Moderating	67981, 17203, 27268, 44854, 39631, 04203, 60532, 38226, 19939 *or* 44335
Freshening	10600, 38477, 46874, 66827, 36645, 07984, 18407, 56709, 33603 *or* 60158
Moderating	21846, 39422, 09387, 33607, 63632, 47165, 54317, 42812, 14719 *or* 28036
Veering	48691, 51317, 22786, 65268, 08673, 40126, 69779, 14937, 50107 *or* 37229
Veering and Freshening	64713, 44503, 22703, 54903, 63621, 08861, 38336, 00143, 21657 *or* 35892
Veering and Moderating	10416, 39821, 24235, 18722, 07462, 32837, 47231, 30174, 24705 *or* 27109
Veering temporarily ...	52834, 39516, 68523, 30195, 22637, 63998, 42515, 37395, 11433 *or* 37111

Velocity at about 1,500 feet :—

Velocity at about 1,500 feet	Under 5 miles per hour	66401, 48111, 05167, 34256, 61232, 11987, 38406, 20385, 43700 *or* 61368
	Under 10 miles per hour...	19276, 36446, 69178, 44941, 59009, 30148, 58209, 49968, 12913 *or* 20964
	Between 5 & 10 miles per hour	44914, 55484, 20994, 43555, 00347, 31653, 06285, 35119, 12089 *or* 39983
	Between 10 & 15 miles per hour	58828, 35674, 50222, 07624, 60128, 64431, 14539, 50666, 48491 *or* 63123
	Between 15 & 20 miles per hour	58432, 36104, 63576, 25064, 20009, 50026, 28513, 46543, 44106 *or* 20867
	Between 20 & 25 miles per hour	63509, 20136, 47761, 30727, 12435, 51583, 48084, 22742, 35321 *or* 54364
	Between 25 & 30 miles per hour	35811, 30369, 60838, 25461 *or* 55708
	Between 30 & 35 miles per hour	61950, 40721, 18519, 25076 *or* 62750
	Between 35 & 40 miles per hour	52586, 60667, 44972, 60278 *or* 52684
	Between 40 & 50 miles per hour	05710, 65957, 41617, 63156 *or* 29271
	Between 50 & 60 miles per hour	66911, 08447, 52761, 69103 *or* 36179
	Between 60 & 70 miles per hour	00274, 15484, 65714, 17739 *or* 27126
	Over 70 miles per hour ...	68963, 42003, 67613, 57208 *or* 34430

WIND—*continued.*

Changes at 1,500 feet or above :—

Remaining constant at about 1,500 feet ...	60557, 29016, 37811, 00440, 63502, 11274, 30356, 36394, 17000 *or* 26803
Increasing at about 1,500 feet	41813, 04783, 43917, 58234, 68104, 35104, 50471, 04004, 65613 *or* 42408
Increasing somewhat at about 1,500 feet ...	66444, 56703, 67823, 30710, 29764, 65903, 31349, 22807, 08288 *or* 47617
Increasing somewhat rapidly at about 1,500 feet	37642, 25454, 59788, 51345, 13295, 09853, 33012, 66984, 04485 *or* 66897
Decreasing at about 1,500 feet	24544, 69164, 52309, 34379, 08462, 56344, 68007, 10267, 60714 *or* 34590
Decreasing somewhat at about 1,500 feet	43612, 60242, 45006, 66526, 48216, 28334, 58969, 69908, 30653 *or* 50228
Decreasing somewhat rapidly at about 1,500 feet	44109, 24759, 13262, 47886, 69724, 33779, 40944, 13157, 07043 *or* 24086
Changing to about ...	32648, 66873, 42583, 52939 *or* 18024
Changing to about 10 miles per hour at about 1,500 feet ...	44258, 54491, 20471, 61040 *or* 31444
Changing to about 15 miles per hour at about 1,500 feet ...	50429, 17210, 22516, 66148 *or* 30168
Changing to about 20 miles per hour at about 1,500 feet ...	41414, 50341, 62715, 40195 *or* 19934
Changing to about 30 miles per hour at about 1,500 feet ...	29135, 33987, 56589, 18576 *or* 62809
Changing to about 40 miles per hour at about 1,500 feet ...	03455, 44812, 11025, 20778 *or* 60416
Changing to about 50 miles per hour at about 1,500 feet ...	30959, 59742, 37231, 60345 *or* 30169
Changing to about 60 miles per hour at about 1,500 feet ...	12767, 42601, 22358, 58123 *or* 13782
Changing to about 70 miles per hour at about 1,500 feet ...	40164, 67003, 39127, 23124 *or* 56308
Changing to over 70 miles per hour at about 1,500 feet ...	03311, 44326, 60528, 57106 *or* 43110
Backing	60859, 31248, 57109, 23408, 64603, 32065, 24103, 48856, 18202 *or* 36289
Veering	62967, 06001, 58115, 44643, 34733, 16188, 22483, 34027, 68897 *or* 44308

CLOUD AND PRECIPITATION.

No Rain.

Fine (mainly b and bc)*	19349, 30037, 03421, 63914 *or* 47709
Fair generally (mainly bc and c)*	25561, 38105, 12043, 06958 *or* 26587
Dull (mainly c and o)*	42697, 19932, 23986, 49781 *or* 00198
Cloudy (mainly bc to o)* ...	33871, 46312, 13400, 24352 *or* 36223
Variable cloud (b to o)* ...	40035, 68991, 13444, 58819 *or* 12702

Showers.

Fair generally, but local showers	30941, 21716, 63857, 21089 *or* 59084
Fair intervals	30915, 46242, 62609, 57503 *or* 28875
Changeable, fair intervals, some showers	32156, 55090, 66917, 20195 *or* 39406
Changeable, showery	44132, 65701, 30671, 39109 *or* 29487
Fair, but thunderstorms not improbable	57193, 55104, 67655, 56214 *or* 11007
Unsettled	23783, 08117, 66426, 48658 *or* 48500
Cloudy, some showers	07228, 19948, 69204, 41492 *or* 38424
Dull, some showers	65355, 30069, 65047, 14781 *or* 13675

Rain.

Some rain	33766, 45583, 17822, 66297 *or* 31891
Dull, some rain	15109, 54276, 31678, 65221 *or* 13774
Dull, rain at times	04750, 20213, 33491, 68816 *or* 39228
Dull, with slight rain	69807, 07691, 67381, 05456 *or* 51251
Rain at times	63023, 01908, 45089, 35627 *or* 44731
Rainy	47643, 56067, 15519, 44755 *or* 62317
Some precipitation	59882, 11834, 47358, 56238 *or* 65501
Considerable precipitation ...	48833, 13378, 32235, 50787 *or* 35702
Occasional drizzling rain	55542, 02408, 50204, 40305 *or* 08189

Improving.

Improving gradually	17347, 68117, 46911, 07251 *or* 30599
Becoming more settled	42026, 38807, 64347, 35866 *or* 51130
Dull early, fair later	67202, 16643, 60837, 54471 *or* 56533
Showery at first, fair or fine later	19401, 23591, 40955, 06300 *or* 60005
Weather improving	03500, 68091, 22932, 06057 *or* 49313
Raining at first, improving later	68199, 46227, 60309, 50913 *or* 07360
Rainy at first, showers and fair intervals later	47555, 69058, 24782, 61047 *or* 50537

Deteriorating:

Fine early, uncertain later ...	06666, 50286, 05774, 31471 *or* 67466

* For meaning of these letters, see page 37.

[*Continued*

CLOUD AND PRECIPITATION—*continued.*

Fine at first, less settled later ...	21792, 60240, 15623, 66864 *or* 18729
Fine at first, rain later	19088, 04125, 17598, 11837 *or* 47985
Becoming less fair	19479, 11059, 04008, 30911 *or* 03034
Becoming less settled	61729, 15003, 08259, 69392 *or* 54000
Fair at first, less fair later ...	67379, 29109, 47179, 65321 *or* 58617
Becoming showery or rainy ...	13947, 24039, 43681, 08753 *or* 67837
Fair at first, some rain later ...	44609, 15127, 60555, 31409 *or* 49711
Fair to-day, some rain to-morrow	13352, 49099, 13944, 31942 *or* 49535
Dull, tendency to rain later ...	15271, 40329, 68977, 06376 *or* 40184
Dull at first, rain later	35207, 10298, 59903, 20835 *or* 62936
Rain spreading over Britain from Westward	53311, 46572, 27414, 04624 *or* 64544

Snow, Hail.

Some snow	41023, 05098, 10634, 67573 *or* 46730
Snow	55839, 32813, 47693, 63896 *or* 50417
Snow showers	19173, 43733, 58914, 41985 *or* 69014
And snow	13616, 59013, 40103, 18813 *or* 22000
Or snow	64089, 50519, 39607, 20267 *or* 55064
Perhaps snow	14209, 00351, 65999, 31527 *or* 56810
Probably snow	01076, 54006, 14733, 36991 *or* 08899
Sleet	50827, 18631, 67633, 05999 *or* 23713
Sleet showers	34408, 28871, 16311, 46813 *or* 61502
Hail showers	07824, 29210, 17987, 08342 *or* 12623
Snow or hail showers	66599, 44891, 39854, 00812 *or* 64303
Some cold precipitation	44550, 38284, 54149, 24958 *or* 34933

Thunder.

Perhaps thunder	29937, 59567, 69524, 19331 *or* 45975
Tendency for thunder	40074, 32741, 04871, 49105 *or* 67784
Increasing tendency for thunder...	09804, 38592, 43408, 12111 *or* 53987
Thunder locally	64459, 25628, 44546, 50006 *or* 39722
Thunder	67782, 56237, 08234, 44803 *or* 69085
Thunderstorms	20537, 64305, 46317, 23107 *or* 11479

FOG.

Occurrence and Locality :—

Coast Fog	41499, 50158, 10453, 20999 *or* 56792
Considerable Fog	63715, 12847, 52237, 10710 *or* 64196
Fog	18059, 58633, 63063, 50579 *or* 07891
Fog at 1 h.	38017, 46010, 44720, 40609 *or* 11835
Fog at 7 h.	66717, 30759, 43306, 43609 *or* 66651
Fog at 13 h.	27438, 16814, 60597, 14854 *or* 38634
Fog at 18 h.	42537, 10017, 38967, 67243 *or* 15549
Fog at 21 h.	47946, 28004, 42611, 09027 *or* 44193
Fog early Inland, clearing later ...	28321, 40038, 46258, 36442 *or* 53402
Fog Locally	51821, 34786, 36691, 11034 *or* 32611
Inland Mist or Fog	48124, 62471, 37013, 46143 *or* 66071
Inland Mist or Fog, developing at Night	30128, 10935, 53467, 10654 *or* 31390
Mist Locally	13453, 30819, 07268, 64626 *or* 53592
Mist or Fog	30158, 39054, 68071, 59513 *or* 67153
Mist or Fog not anticipated ...	51307, 15501, 20182, 61326 *or* 29339
Misty	37895, 44992, 07855, 44529 *or* 21401
Misty Seaward	50401, 66503, 36378, 53109 *or* 57981
Morning Mist or Fog	35912, 43708, 20208, 43669 *or* 49867
Much Fog	23456, 37734, 36590, 68866 *or* 46901
Sea Fog	14827, 10106, 42848, 09313 *or* 34901
Some Mist or Fog	18209, 20900, 06863, 66851 *or* 54308
Tendency to Fog	38912, 14482, 09599, 33672 *or* 40517
Thick Fog	51809, 34669, 54632, 63304 *or* 28147

CARDINAL NUMBERS.

0	32004, 44764 *or* 20914
1	13119, 68401 *or* 56629
2	53905, 35416 *or* 39113
3	66203, 21453 *or* 65733
4	40190, 51896 *or* 20347
5	34242, 13584 *or* 36657
6	68069, 47811 *or* 48976
7	55437, 06101 *or* 55948
8	66384, 10076 *or* 65845
9	30528, 46037 *or* 42786
10	21106, 38704 *or* 24637
11	52609, 22534 *or* 58264
12	69843, 52137 *or* 40010
13	66054, 30034 *or* 18268
14	00438, 65772 *or* 37419
15	29673, 68217 *or* 09147
16	33117, 05866 *or* 30617
17	50531, 31694 *or* 38794
18	50961, 26748 *or* 08883
19	31026, 51713 *or* 44520
20	22597
21	65963
22	42860
23	51087
24	35731
25	60347
26	24899
27	12013
28	01474
29	53701
30	60173
31	30924
32	11748
33	06877
34	52323
35	35501
36	29889
37	19795
38	40050
39	59299
40	06743
41	66372
42	37134
43	15337
44	63989
45	44361
46	28458
47	36610
48	56003
49	61492
50	19876
51	56857
52	24394
53	47084
54	67577
55	17352
56	38009
57	50469
58	66366
59	38203
60	59544
61	13813
62	43109
63	65123
64	38741
65	13985
66	69406
67	52005
68	64478
69	32035
70	00359
71	21303
72	46855
73	51511
74	16513
75	45983
76	57805
77	65165
78	16697
79	23485
80	57540
81	27996
82	44533
83	69245
84	15208
85	50864
86	31827
87	57996
88	00203
89	66154
90	32336
91	47298
92	23829
93	52217
94	30331
95	00045
96	56951
97	34329
98	49764
99	19056
100	30061
100 and	58660
200	44263
200 and	12898
300	06343
300 and	44010
400	60804
400 and	31599
500	14027
500 and	57417
600	62664
600 and	20937
700	45617
700 and	53694
800	60659
800 and	52926
900	30728
900 and	18768
980	68511
981	22237
982	43536
983	53927
984	63127
985	18021
986	51168
987	24846
988	34701
989	60943
990	40041
991	51347
992	03750
993	30239
994	05737
995	53805
996	42391
997	68389
998	41534
999	21419
1000	50907
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1001	27085
1002	48685
1003	58756
1004	40233
1005	68832
1006	31292
1007	67188
1008	28735
1009	67717
1010	05913
1011	21195
1012	61159
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Mist	50143
Moderate	67791
Moderating	00167
Month	49486
More	39372
Morning	56411, 49927, 37462, 50795, 10125, 44745, 50279, 12609 47704, *or* 33258
Moscow	51944
Most	30649
Mostly	41904
Motion	23386
Mouth	09291
Mouth of	47686
Move	21900
Moving	54506
Much	18416
Mudros	49601
Munich	00023
Must	54581

Must be	43291
Must have	21384
N ...	11157
Nairn	66623
Namur	55309
Near	20622, 63057, 49238, 04151 *or* 51986
Near by	14658
Near to	21272
Nemours	45214
Netherlands	19130
Neufahrwasser	02539
New	45335
News	16078
News of	58812
Nice	65434
Nicolaieff	37707
Night	10739
Nightfall	57211
Nights	32468
No ...	45527
No indication of any	14389
No material change	20616
No material change in weather ...	66632
No material change in wind ...	16259
None	28496
Noon	08970
Normandy	42527
North	32529
North coast of France	22406
North Cone	68714, 34720, 49529, 27763, 18017, 53761, 15131, 33931, 64867 *or* 13719
North Cone hoisted	45192, 52895, 48369, 63825, 58195, 26358, 12221, 60910, 46867 *or* 28316
North Cone lowered	34929, 19643, 23972, 64590, 13851, 42476, 20673, 32374, 07061 *or* 69233
North-East	38375
North-East coast-s	19002
North-East France	29179
North-Easterly	61804
North-Eastern Districts	14901
North Ireland	20384
North of Latitude	35473
North Sea	27800
North Scotland	67977
North Wales	45874

North-West 30478
North-West coast-s ... 11509
North-Westerly 07119
Northerly 29708
Northern 15064
Northern coast-s 61758
Northern district-s ... 32933
Northern part of North Sea 38770
Norway 29613
Norwegian 40209
Not 64939, 59444, 32223, 27036 *or* 46291
Nottingham 03777
Now... 25429

O 14268
Observation-s 30162
Occasional 60079
Occasioning 50711
O'clock 44318
Odessa 63247
Of 02384, 47402, 36339, 09634 *or* 17392
Of importance 35389
Off 68437
Off at 39900
Office 40016
Offices 24006
On 02285
On to 65311
Opening 50135
Oporto 24211
Or 15443, 34617, 09111, 48264, 17205, 37903, 55173, 20109, 61648 *or* 28673
Oran 43541
Orenburg 37339
Orkney 29627
Orkneys and Shetlands ... 49327
Ostend 16137
Other 03053
Other coasts 44071
Others 28245
Otherwise 39125
Ought 09911
Ought not 42429
Ought not to 21376
Ought to 15351
Our 69633
Out 23841
Out of 46353
Outer 12550
Outlook 53511
Outside 48307

Over 22091
Over Ireland 32609
Overcast 47991

P 16687
Palermo 38742
Palma 09160
Parallel 30837
Paris 26438
Part 50317
Passed 38511
Passing 49356
Past 54972
Path 18117
Patras 68411
Pembroke 04728
Perhaps 15929
Perm 54106
Perpignan 61843
Persisting 07473
Persistent 14809
Pesaro 61799
Petrograd 11351
Pilot balloon ascent ... 05067
Place 32442
Places 09768
P.M. 69986
Point 15739
Points 35535
Ponta Delgada 41506
Port Said 64687
Portland Bill 20811
Position 19855
Positions 22489
Possible 53797
Possibly 46777
Powerful 21514
Prague 63614
Present 38232
Pressure 56572
Pressure becoming uniform 17485, 30077, 43576, 60828 *or* 19968
Pressure very uniform 38304, 61206, 40269, 35502 *or* 58677
Presumably 62899
Prevailing 14576
Prevalent 37927
Probable 09660
Probably 46136

Q 23809
Quarter 67366
Quickly 07392

Quiet 31617
Quite 44881

R 01147
Rain 36547
Rainfall 49006
Rainy 58217
Rapidly 36927
Rather 04057
Reaching 68131
Reading 40317
Rear of 67956
Rear of depression ... 44513
Region 56999
Region of 44201
Regions 68602
Regions of 43347
Remain 62914
Remaining 40085
Removing 69692
Reports 61107
Reports not yet received from 37209
Reports not yet received from Denmark ... 40375
Reports not yet received from Faroe ... 11944
Reports not yet received from France ... 64321
Reports not yet received from Hebrides ... 22674
Reports not yet received from Holland ... 14107
Reports not yet received from Iceland ... 65532
Reports not yet received from Ireland ... 13514
Reports not yet received from Norway ... 16033
Reports not yet received from Shetland ... 60987
Reports not yet received from Sweden ... 22111
Riga 49467
Rise of barometer 50321
Rising 37337
Rising barometer 52813
River 19264
Roche's Point 41254
Rochefort 34551
Rome 27932
Rostov-on-Don 64898
Rouen 35339
Rough 41126

Round 15664
Roumania 34276

S 30002
Salonika 47123
Sanguinaire 11792
Santa Cruz (Flores) ... 67503
Saratov 33291
Saturated 20215
Saturation 67301
Scandinavia 00476
Scilly 64458
Scotland 43145
Sea 16111
Seas 12940
Seaward 39203
Secondary 24921
Serbia 36901
Serious 04711
Seriously 30977
Setif 65823
Settled 15438
Settling 47801
Several places 29073
Sfax 69126
Shall 41311
Shallow 02587
Shaped 60932
Shetlands 21871
Shift 49813
Shifting 18136
Shifts 44852
Shore 08417
Shortly 62388
Should 30786
Should be 64917
Should have 42853
Should not 17851
Should not be 48409
Should not have 09734
Showers 38096
Showery 64398
Sidi Barrani 26027
Similar 65977
Skagerack 08779
Skirt 60787
Skirting 58307
Skudesnæs 30310
Sky 44798
Slackening 30914
Sleet 42206
Slight 68747
Slightly 36668

Slowly 57631
Small 09939
Small but deep 34481
Smooth 09183
Smyrna 66027
Snow 28411
Sofia 68997
Some 14615
Some point 08233
Somewhat 49986
Soon 22179
Soukhoum 65001
South 26639
South Coast of England ... 56320
South Cone — 20065, 49785, 63421, 43356, 03284, 19642, 44717, 32973, 40307 *or* 04353
South Cone hoisted — 69117, 45106, 11476, 31168, 40303, 06769, 48810, 21592, 57155 *or* 27919
South Cone lowered — 44368, 46585, 34620, 15414, 66742, 03377, 57314, 12991, 44625 *or* 54168
South-East 51000
South-East coast-s ... 16913
South-Easterly 21522
South Farnborough ... 43514
South Ireland 67853
South of Latitude 34268
South Wales 67866
South-West 16211
South-West coast-s ... 11713
South-Westerly 46177
Southerly 31079
Southern 44011
Southern coast 49854
Southern part of North Sea 20734
Spain 40893
Special 46127
Spitzbergen 14304
Spread 18703
Spreading 69766
Spreading from N. ... 19749
Spreading from N.E. ... 45597
Spreading from E. ... 58893
Spreading from S.E. ... 21243
Spreading from S. 06726
Spreading from S.W. ... 12176
Spreading from W. ... 65923
Spreading from N.W. ... 11625
Spurn Head 29981
Squall 44279

Squalls — 64927, 45489, 36681, 45084, 37879, 20186, 37537, 03222, 22417 *or* 43650
Squally — 15835, 57439, 06527, 40758, 07957, 34622, 06901, 26903, 55981 *or* 67179
Station 55320
Stationary 64213
Stations 05356
Still 43623
Still falling 39267
Still rising 27395
Stockholm 58398
Stopping 48371
Storm 30201
Storms 67474
Stormy 17299
Stornoway 53176
Straits 14146
Straits of 54677
Strong 21234
Strongly 31759
Succeed 44310
Succeeding 46352
Sudden 38502
Suddenly 66531
Sunrise 56134
Sunset 68541
Sweden 35581
Swedish 21003
Swinemunde 44986
Switzerland 30083

T 44675
Tarkhantout 21752
Temperature 05025
Temporarily 48051
Temporary 67753
Tendency 30182
Texel 61384
Thames 20153
Thames Estuary 36139
Than 65673
That 25042
The 34111
The Helder 44693
The Scaw 54711
Then 57917
There 37617
This 22780
Those 44805
Threatening 69311
Three quarters 48703

Throughout 58723
Thunder 43434
Thunderstorm 60536
Thunderstorms 27713
Times 03412
To 63966
To-day — 05200, 36074, 35532, 28113, 31193, 26245, 50398, 22287, 09233 *or* 28768
To-morrow — 40453, 02787, 22603, 46109, 14293, 43955, 54886, 19104, 07333 *or* 44439
To-night — 52286, 17505, 23091, 07797, 10555, 36234, 11636, 46575, 18935 *or* 69942
Too 33634
Tory Island 44380
Towards 06372
Travel 23314
Travelling 55893
Trieste 46418
Tripoli 48900
Trough 15369
Trough of depression ... 30513
Trough of low barometer... 64720
Trough of V-shaped depression ... 55990
Tunis 05153
Turin 49834
Turning 19153
Tynemouth 05820
Type 26145

U 66757
Uleaborg 43601
Uncertain 59172
Unchanged 21579
Under 00844
Underneath 51434
Unfavourable 37855
Unfavourable for manœuvring Airships — 16493, 63997, 43575, 40210, 15970, 21731, 45231, 69219, 57943 *or* 39346
Uniform 00317
Uniformly 52701
United Kingdom 13092
Unless 38862
Unsettled 64014
Until 52356

Unto 33471
Up 05690
Up to 14361
Upon 43542
Upper 11610
Ushant 59876
Utrecht 31717

V 06693
V-shaped depression ... 30927
Valencia 12431
Valley 43294
Valleys 62535
Vardö 09201
Variable 24317
Various coasts 59108
Veer... 11581
Veering 20519
Velikie Luki 59716
Velocity 45001
Venice 14638
Very 22248
Very slight-ly 59953
Viatka 62133
Vienna 30616
Viesti 30711
Violent 50019
Visibility 68695

W 42879
Warning 20143
Warnings 00138
Was 69263
Water 57613
Weather 20091
Wedge 65688
Week 12506
Weeks 59298
Well... 31567
Were 46623
West 09059
West coast of 13708
West of longitude ... 43906
Western 38839
Western Channel 23749
Western Channel and Bay 49197
Western coasts 37628
Western districts 01354
Western half of North Sea 59171
Western Mediterranean ... 39149
Wet bulb 00132
Whether 60451
Whole 22314

Wick	00126
Wilhelmshaven	38632
Will	06987
Will be	35401
Will continue	43239
Will have	33509
Will not	58136
Will not be	29559
Will not have	68258
Wind	04931
Wind and Weather ...	58814
Winds	30173
Wisby	44288
With	13642
Withdrawing	08307
Would	42149
X	10593
Y	59813
Yards	32323
Yarmouth	07007
Year	54055
Years	25514
Yesterday	17235
Yorkshire	30026
You may anticipate	05777, 39308 *or* 67700
Z	15979
Zuider Zee	19913

TABLE I.

SPELLING TABLE.

Note :—Groups taken from the Table overleaf must invariably be preceded by one of the following groups:—

Decypher following 2 groups from Table I ...	42958, 26127, 50677, 09274, 45903, 54555, 30429, 33711, 49586 *or* 30956
Decypher following 3 groups from Table I ...	03461, 34623, 27603, 69561, 46798, 30481, 23378, 31247, 08666 *or* 14911
Decypher following 4 groups from Table I ...	08644, 10182, 51530, 10760, 25163, 30623, 10638, 44641, 61862 *or* 43285
Decypher following 5 groups from Table I ...	43368, 25011, 44617, 45066, 63679, 02001, 50652, 43535, 12964 *or* 34608
Decypher following 6 groups from Table I ...	02926, 68492, 15756, 23628, 38601, 25337, 51398, 21176, 37964 *or* 07440
Decypher following 7 groups from Table I ...	32661, 06503, 26011, 49914, 48791, 04088, 00195, 21693, 67903 *or* 43259
Decypher following 8 groups from Table I ...	52246, 27654, 66606, 37186, 42625, 56379, 21646, 66202, 11309 *or* 01426
Decypher following 9 groups from Table I ...	48914, 55628, 63391, 42195, 15468, 32218, 43317, 60501, 07913 *or* 30801
Decypher following 10 groups from Table I ...	08701, 42705, 07734, 51011, 09258, 54391, 00226, 57609, 31311 *or* 12227
Decypher following 11 groups from Table I ...	49273, 20432, 48599, 58517, 00186, 50193, 53824, 16792, 25203 *or* 31854
Decypher following 12 groups from Table I ...	00278, 56828, 18172, 36723, 08398, 52429, 15193, 67945, 66391 *or* 44305

Spelling Table—*continued.*

For Letter	*Write*
A	844, 566, 299, 057 *or* 428
B	546, 217 *or* 485
C	245, 672 *or* 836
D	052, 487 *or* 049
E	837, 015, 957, 056 *or* 797
F	948, 554 *or* 276
G	216, 795 *or* 099
H	897, 432 *or* 358
I	387, 631, 968 *or* 633
J	568, 031 *or* 445
K	064, 989 *or* 915
L	497, 599 *or* 492
M	087, 051 *or* 636
N	887, 965, 032, 937 *or* 337
O	129, 684, 075, 931 *or* 029
P	829, 784 *or* 435
Q	985, 429 *or* 734
R	833, 577 *or* 361
S	995, 949 *or* 447
T	679, 762, 624, 754 *or* 642
U	761, 113 *or* 050
V	154, 558 *or* 353
W	683, 089 *or* 564
X	175, 972 *or* 767
Y	773, 537 *or* 266
Z	726, 278 *or* 121

TABLE II.

For re-cyphering 5-FIGURE INTERNATIONAL GROUPS.

Note :—Groups taken from this Table must invariably be preceded by one of the following groups :—

Decypher following **2** groups from Table II	18535, 31959, 45704, 34969, 11895 34801, 40466, 30101, 14017, 36208 65914, 36152, 52616, 64976, 22916 63213, 56648, 03623, 60438, 36541 10784, 49435, 01379, 25107 *or* 59235
Decypher following **3** groups from Table II	05622, 60953, 31266, 55107, 15637, 24447, 68097, 19538, 44953, 22398, 50339, 10902, 60547, 48313, 23649, 59134, 26921, 48195, 66629, 11556, 06043, 57485, 68473, 36832 *or* 17581
Decypher following **4** groups from Table II	43926, 60304, 21803, 12865, 38667, 03391, 66254, 44600, 27300, 11097, 30521, 64803, 24586, 01258, 17627, 63171, 08025, 65151, 32185, 14661, 49007, 04689, 30091, 10161 *or* 43689
Decypher following **5** groups from Table II	16619, 45672, 67311, 30771, 14343, 41385, 68497, 33843, 18987, 66006, 47584, 29716, 12678, 64725, 50455, 63754, 44873, 10563, 66099, 37585, 47369, 25598, 66991, 41561 *or* 20331
Decypher following **6** groups from Table II	67482, 32627, 17620, 62793, 44889, 10083, 27490, 60192, 01974, 36699, 59711, 26617, 67057, 44019, 10212, 52411, 45539, 03864, 69290, 23892, 40082, 66343, 17193, 30471 *or* 20235
Decypher **all** the following groups from Table II	00972, 28609, 51382, 25421, 63573, 22680, 38343, 49587, 13282, 41308, 31123, 57885, 65790, 43509, 20952, 16802, 45190, 60901, 33985 *or* 08683

For	*Write*	
0	754, 056 *or* 445	Only to be used as laid down in par. 11 of the Instructions on page 3.
1	481, 021 *or* 525	
2	766, 694 *or* 212	
3	257, 752 *or* 495	
4	086, 381 *or* 847	
5	586, 925 *or* 461	
6	394, 582 *or* 090	
7	157, 978 *or* 417	
8	254, 667 *or* 519	
9	783, 045 *or* 162	
00	678, 977, 161, 362, 012, 866 *or* 991	
01	383, 662, 465, 936, 249, 514 *or* 186	
02	521, 134, 035, 695, 496, 893 *or* 235	
03	855, 098, 675, 386, 986, 529 *or* 231	
04	955, 295, 733, 442, 138, 567 *or* 316	

TABLE II.—*continued.*

For	*Write*
05	053, 421, 666, 753, 311, 834 *or* 914
06	572, 199, 823, 413, 798, 167 *or* 314
07	264, 994, 323, 096, 623, 873 *or* 544
08	871, 286, 774, 451, 954, 070 *or* 712
09	112, 325, 993, 494, 023, 816 *or* 355
10	637, 238, 932, 791, 512, 839 *or* 169
11	869, 019, 541, 867, 479, 389 *or* 853
12	596, 153, 689, 963, 322, 017 *or* 563
13	318, 719, 296, 515, 872, 412 *or* 065
14	751, 171, 513, 898, 214, 345 *or* 939
15	941, 143, 028, 786, 283, 532 *or* 841
16	724, 493, 176, 533, 881, 013 *or* 927
17	584, 225, 838, 088, 352, 744 *or* 146
18	625, 444, 749, 273, 397, 815 *or* 215
19	076, 565, 934, 411, 274, 612 *or* 133
20	426, 732, 022, 811, 549, 924 *or* 365
21	731, 944, 292, 522, 826, 692 *or* 434
22	224, 654, 796, 319, 055, 433 *or* 877
23	918, 743, 025, 557, 391, 848 *or* 253
24	688, 379, 151, 725, 427, 071 *or* 917
25	343, 886, 653, 473, 135, 756 *or* 054
26	589, 192, 962, 484, 727, 288 *or* 331
27	211, 745, 069, 579, 942, 438 *or* 663
28	141, 856, 553, 486, 772, 172 *or* 077
29	988, 456, 681, 259, 328, 765 *or* 528
30	453, 155, 824, 219, 614, 366 *or* 919
31	728, 281, 618, 149, 945, 888 *or* 475
32	097, 671, 448, 714, 193, 297 *or* 158
33	656, 973, 163, 078, 317, 489 *or* 759
34	854, 294, 382, 959, 443, 548 *or* 335
35	298, 729, 455, 827, 159, 042 *or* 613
36	741, 499, 341, 865, 222, 971 *or* 585
37	595, 261, 858, 367, 033, 742 *or* 469
38	339, 819, 148, 967, 116, 889 *or* 619
39	125, 527, 715, 452, 951, 622 *or* 831
40	459, 721, 268, 044, 132, 329 *or* 594
41	952, 066, 878, 241, 431, 518 *or* 722
42	263, 592, 711, 821, 638, 471 *or* 084
43	418, 198, 372, 846, 094, 792 *or* 262
44	562, 822, 611, 243, 716, 929 *or* 137
45	862, 039, 588, 415, 676, 168 *or* 961
46	755, 351, 664, 128, 591, 885 *or* 498
47	014, 441, 736, 864, 275, 658 *or* 177
48	987, 326, 067, 868, 111, 779 *or* 213
49	526, 835, 188, 327, 287, 040 *or* 374
50	436, 648, 849, 195, 794, 597 *or* 928
51	616, 363, 547, 072, 884, 119 *or* 478
52	748, 165, 488, 696, 255, 799 *or* 060
53	356, 768, 131, 818, 458, 651 *or* 575
54	782, 063, 876, 635, 289, 183 *or* 984
55	233, 998, 468, 687, 074, 196 *or* 776
56	536, 145, 293, 926, 771, 336 *or* 118

TABLE II.—*continued.*

For	*Write*
57	974, 091, 375, 788, 139, 574 *or* 896
58	643, 891, 197, 517, 422, 969 *or* 735
59	184, 556, 899, 036, 234, 677 *or* 463
60	027, 922, 587, 223, 691, 892 *or* 348
61	913, 271, 757, 632, 569, 123 *or* 419
62	466, 787, 377, 079, 237, 516 *or* 997
63	639, 075, 251, 857, 956, 346 *or* 477
64	395, 879, 439, 621, 921, 746 *or* 539
65	476, 693, 092, 232, 359, 883 *or* 156
66	851, 227, 698, 737, 011, 399 *or* 491
67	953, 523, 018, 244, 894, 747 *or* 334
68	095, 258, 911, 852, 185, 634 *or* 454
69	777, 628, 393, 194, 938, 047 *or* 874
70	315, 545, 668, 252, 041, 464 *or* 164
71	875, 396, 483, 645, 226 038 *or* 778
72	543, 923, 267, 347, 882, 555 *or* 685
73	127, 081, 832, 242, 524, 649 *or* 147
74	789, 446, 655, 916, 371, 016 *or* 812
75	239, 552, 117, 673, 068, 321 *or* 946
76	861, 247, 641, 080, 187, 538 *or* 333
77	437, 738, 282, 665, 895, 385 *or* 026
78	646, 357, 142, 576, 414, 813 *or* 115
79	061, 457, 723, 285, 561, 181 *or* 312
80	935, 718, 046, 828, 462, 236 *or* 652
81	535, 388, 764, 191, 073, 814 *or* 982
82	769, 126, 378, 825, 229, 999 *or* 423
83	124, 313, 474, 615, 551, 083 *or* 644
84	845, 482, 093, 174, 248, 629 *or* 342
85	279, 030, 996, 324, 859, 122 *or* 559
86	598, 992, 758, 048, 256, 657 *or* 173
87	082, 713, 265, 398, 189, 674 *or* 964
88	793, 228, 034, 583, 669, 373 *or* 472
89	114, 661, 976, 277, 863, 085 *or* 542
90	817, 272, 593, 392, 647, 958 *or* 059
91	626, 416, 269, 178, 979, 043 *or* 368
92	364, 933, 467, 058, 179, 843 *or* 531
93	912, 534, 717, 291, 424, 166 *or* 332
94	037, 218, 573, 842, 354, 682 *or* 449
95	246, 511, 966, 739, 338, 947 *or* 699
96	983, 062, 763, 425, 376, 136 *or* 571
97	659, 221, 578, 182, 785, 697 *or* 981
98	775, 024, 284, 581, 627, 349 *or* 152
99	369, 617, 781, 943, 384, 686 *or* 144

THE BEAUFORT WIND SCALE.

(Extracted from "The Weather Map"—M.O. publication No. 225.)

Velocities at about 30 feet above ground.		Beaufort Number.	Description of Wind.		
Statute Miles per Hour.	Metres per Second.		General.	At Sea.	On Land.
Less than 1	Less than 0.3	**0**	Calm	... ...	Calm ; smoke rises vertically.
1 to 3	0.3 to 1.5	**1**	Light air ...	Light breeze	Direction of wind shown by smoke drift, but not by wind vanes.
4 to 7	1.6 to 3.3	**2**	Slight breeze		Wind felt on face ; leaves rustle ; ordinary vane moved by wind.
8 to 12	3.4 to 5.4	**3**	Gentle breeze		Leaves and small twigs in constant motion ; wind extends light flag.
13 to 18	5.5 to 8.0	**4**	Moderate breeze ...	Moderate breeze	Raises dust and loose paper ; small branches are moved.
19 to 24	8.1 to 10.7	**5**	Fresh breeze...		Small trees in leaf begin to sway ; crested wavelets form on inland waters.
25 to 31	10.8 to 13.8	**6**	Strong breeze	Strong wind	Large branches in motion ; whistling heard in telegraph wires ; umbrellas used with difficulty.
32 to 38	13.9 to 17.1	**7**	Moderate gale (*High Wind*)		Whole trees in motion ; inconvenience felt when walking against wind.
39 to 46	17.2 to 20.7	**8**	Fresh gale ... (*Gale*)	Gale forces	Breaks twigs off trees ; generally impedes progress.
47 to 54	20.8 to 24.4	**9**	Strong gale ...		Slight structural damage occurs (chimney-pots and slates removed).
55 to 63	24.5 to 28.4	**10**	Whole gale ...	Storm forces	Seldom experienced inland ; trees uprooted ; considerable structural damage occurs.
64 to 75	28.5 to 33.5	**11**	Storm ...		Very rarely experienced ; accompanied by widespread damage.
Above 75	33.6 or above	**12**	Hurricane ...	Hurricane	

THE BEAUFORT WEATHER NOTATION.

(Extracted from "The Weather Map"—M.O. publication No. 225.)

b blue sky (not more than a quarter of the sky covered).
bc sky partly cloudy (one half covered).
c generally cloudy (three quarters covered).
d drizzle, or fine rain.
e wet air without rain falling, a copious deposit of water on trees, buildings or rigging.
f fog.
g gloom.
h hail.
l lightning.
m mist.
o overcast sky.
p passing showers.
q squalls.
r rain.
rs sleet, *i.e.*, rain and snow together.
s snow.
t thunder.
u ugly, threatening sky.
v unusual visibility. The horizon or distant hills unusually clear.
w dew.
x hoar frost.
z dust haze ; the turbid atmosphere of dry weather.